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**ATTORNEY-CLIENT PRIVILEGED**

**TO:** Distribution **DATE:** November 8, 1993

**FROM:** Charles E. B. Glenn /csg

**RE:** PM 1412 - Method of Purifying Putrescine N-Methyltransferase from  
Tobacco Plant Extract with a Polyamine;  
PM 1687 - DNA Sequences That are Overly Expressed in Tobacco  
Roots; and  
PM 1696 - Putrescine N-Methyltransferase, Recombinant DNA  
Molecules Encoding Putrescine N-Methyltransferase, and  
Transgenic tobacco Plants with Altered Nicotine Content

**FILE**

The following is provided as a review of our biotech-related patent portfolio.

PM 1412 discloses a method of purifying putrescine n-methyltransferase (PMT). Within the next several months, PM 1412 should issue with a claim on the purification process. The claim has acceptable scope, however, we have filed a continuation application (PM 1412 CONT) to pursue even broader coverage on the process.

PM 1412 also discloses and claims a partial amino acid sequence for PMT. We have the option of filing a divisional application on those claims at any time during the pendency of PM 1412 CONT. → ? *includes what*

PM 1696 sets forth and claims the DNA sequence which encodes PMT. Claim 1 of the application claims "a recombinant DNA molecule" in a broad functional format such that claim 1 should prevent others from avoiding infringement by simply changing one or more of the nucleotides of the disclosed DNA sequence.

PM 1687 discloses certain DNA sequences derived by differential hybridization, and at least two of those sequences have evidenced an impact on the production of alkaloids in tobacco tissue. Fish & Neave was near completion of the draft application and they estimated that completion of the application together with filing and paying of government fees might cost approximately \$4,000 to \$6,000, including the cost of depositing samples of the two sequences. The rather piecemeal scope of this patent application and its apparent disconnection with any identifiable business purpose would seem to warrant our dropping PM 1687.

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Drop

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November 8, 1993

If we drop PM 1687, a question remains whether we should publish any portions or all of it. Both inventors, Messrs. Wahab and Malik have left Philip Morris.

CEBG/ch

Distribution:

- ✓ C. Ellis  
K. Houghton  
C. Lilly

Olc P  
As firm does not  
want to put out  
patents.

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